

### **ABSTRACT**

The present invention relates to a recombinant calf-Chymosin protein as set forth in SEQ ID No. 1; a recombinant calf-Chymosin gene as set forth in SEQ ID No. 2 encoding the protein comprising amino acid sequence of SEQ ID NO.1; an *E.coli* comprising the recombinant chymosin gene of SEQ ID No. 2; an expression vector pET21b comprising recombinant calf-chymosin gene as set forth in SEQ ID No. 2; and lastly a method for producing recombinant calf-chymosin protein as set forth in SEQ ID No. 1 which comprises steps of isolating calf-chymosin gene, cloning the same in bacterial expression vector pET21b, transforming said cloned vector into cells of *E.coli*, fermenting said *E.coli* to produce pro-chymosin, converting said pro-chymosin to chymosin and subsequently recovering the recombinant calf-chymosin.